CHAPTER 3

REAL TIME DISPLAY

Section 3.1 Introduction

To open the `Real Time Display` (Figure 3-1), the operator clicks on the **Real Time Display** button on the Main RDA HCI (Figure 2-3). The `Real Time Display` will appear with a blank background. If data is currently being sent, then within two seconds, the display will start to paint and the LED in the upper corner of the display will change from red to green. The **Real Time Display** button is only available on the RDA HCI when the operator has successfully logged into the RDA. It can only be accessed from localhost.

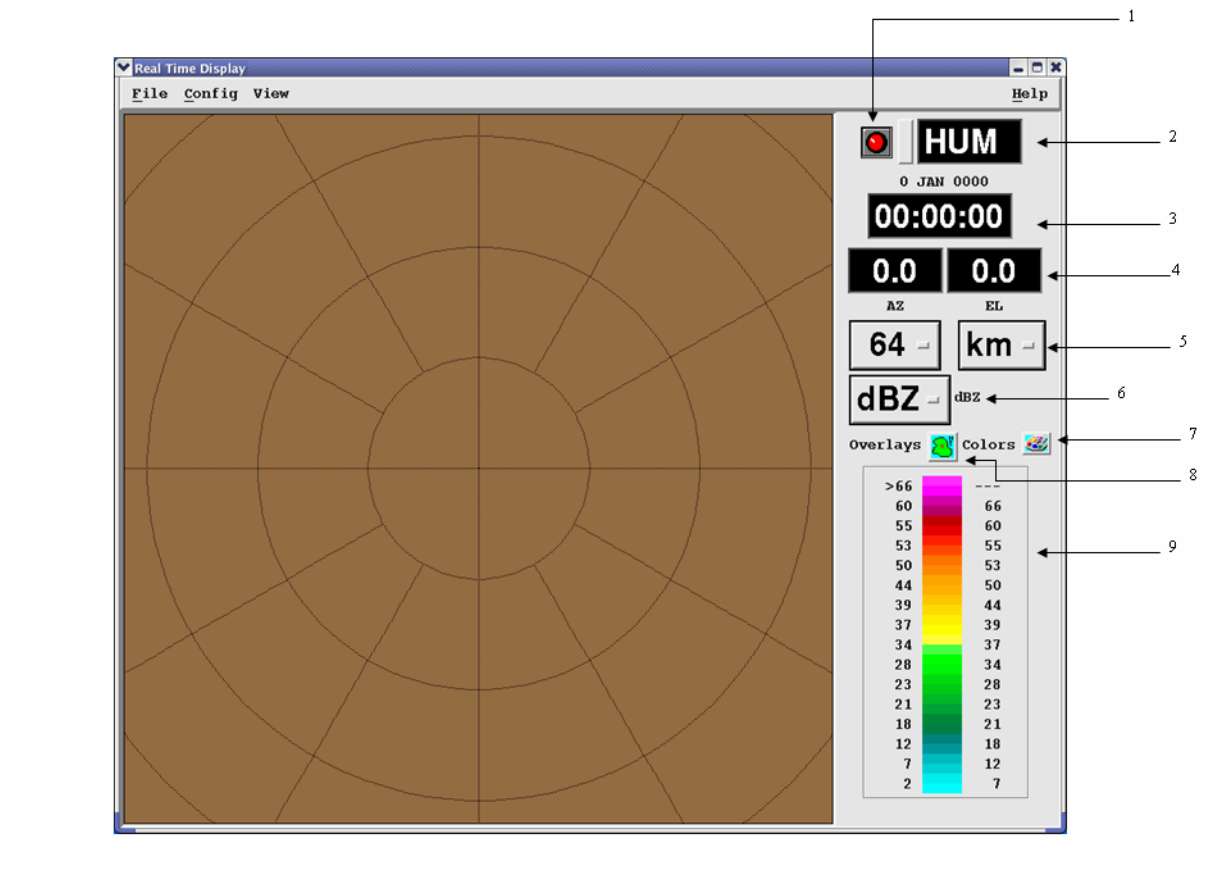

Figure 3-1. Real Time Display

3.1.1 OVERVIEW OF THE REAL TIME DISPLAY.

The `Real Time Display` allows the operator to instantaneously view the data as it is acquired. The rays of data are "painted" on the display as the antenna scans, with no perceptible delay. The Real Time Display is comprised of the following parts:

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- Main Menu - The menu at the top of the window allowing the operator to access all of the commands available.

- Display Information Panel - Located on the right side of the display. The display information panel shows the current date and time, the azimuth and elevation, the maximum range, and the type of data on the display. The operator can also select the overlay and colors on this panel. Each part of the display information panel are described in Table 2.

Table 3-1. Real Time Display

The RDA Fields, values, and/or functions are summarized below:		
Index No.	Field	Description
1	Status LED	Displays the status of the data stream to the real time display. Fixed red on startup indicates that no data is being sent, or that data has not been received for five minutes (time-out). Flashing green indicates that data is currently being received. Fixed green indicates that data is not currently being received, but data has been received within the last five minutes.
2	Site ID	This field shows the thre letter radar site ID.
3	Time Display	The data time is displayed to the nearest second in large format numerals. This will update approximately once per second when data is received. When no data is being received, the display time will not update so that the time will reflect the data that remains on the screen. The date of the data is displayed in smaller characters above the time.
4	AZ/EL Display	Azimuth and elevation angles are displayed to the nearest tenth degree in large format numerals. This will update approximately once per second when data is received. When no data is not being received, the angles will not update.
5	Maximum Range	One of four maximum ranges can be selected by clicking on the numerical field under the AZ/EL display. To set these ranges and the units, use **Config<Ranges**.
6	Data Selection for Display	Click on this field to select the type of data for display. The choices are dBZ, Velocity, and Width. After the operator has made their selection, the display will reset and start painting the new data type.
7	Colors	
8	Overlays	This function is not used.

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Table 3-1. Real Time Display- Continued

The RDA Fields, values, and/or functions are summarized below:		
Index No.	Field	Description
9	Legend	

3.1.2 MAIN MENU.

The main menu bar of the `Real Time Display` is located across the top. It includes a File, Config, and Size menu.

3.1.2.1 File Menu. The File menu (Figure 3-2) contains the commands Open, Save as, Print, and Exit.

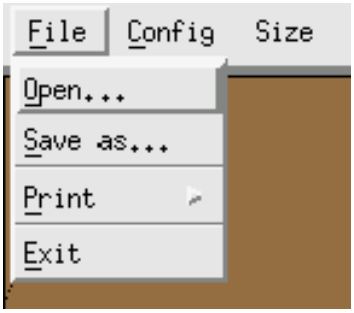

Figure 3-2. File Menu

3.1.2.1.1 Open. `Open` pops up a list of configuration files. Choose the one you want to load.

3.1.2.1.2 Save As. `Save as` lets you save your configuration under the same name or under a new name that you specify.

3.1.2.1.3 Print. `Print` creates an X-window dump of the menu you are running.

3.1.2.1.3.1 Print to File. The `print to file` sends the output to a file in your default directory.

3.1.2.1.3.2 Print Setup. The `print setup` lets you configure the printer on your system.

3.1.2.1.4 Exit. `Exit` closes the `Real Time Display`.

3.1.2.2 Config Menu. The Config menu (Figure 3-3) allows you to change some basic parameters. It contains Ranges, RHI Display Options, Text Color, and Sweep Line.

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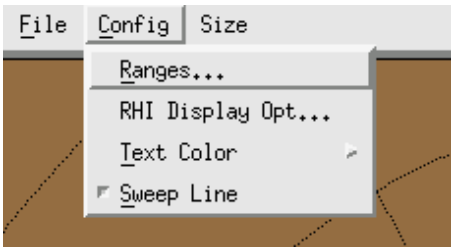

Figure 3-3. Config Menu

3.1.2.2.1 Ranges. `Ranges` allows the operator to modify the list of available display ranges. See Figure 3-4.

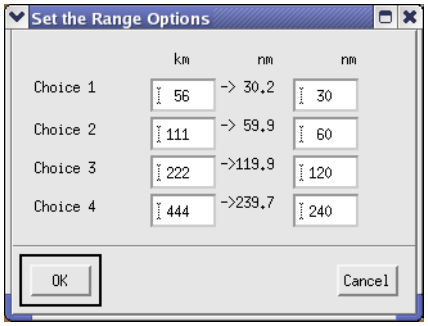

Figure 3-4. Set the Range Options Window

3.1.2.2.2 RHI Display Options. The `RHI Display Opt` allows the operator to change the appearance of the RHI displays. See Figure 3-5.

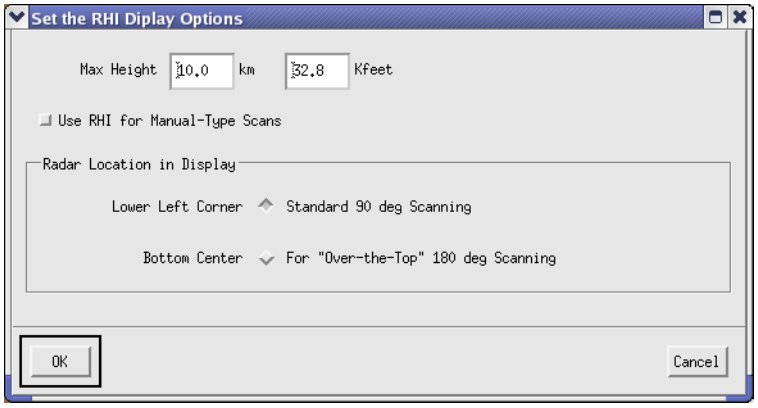

Figure 3-5. Set the RHI Display Options Window

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3.1.2.2.3 Text Colors. `Text color` allows the operator to choose the color for text.

3.1.2.2.4 Sweep Line. `Sweep line` allows the operator to enable/disable a line showing the radar sweep.

3.1.2.3 Size Menu. The Size menu (Figure 3-6) allows the operator to change the size of the `Real Time Display`.

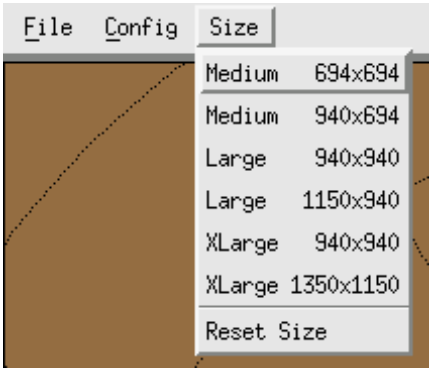

Figure 3-6. Size Menu

3.1.3 STATUS LED.

The LED at the top, right corner of the display shows the status of the data stream to the Real Time Display.

- Fixed red on startup indicates that no data is being sent, or that data has not been received for five minutes (time-out).
- Flashing green indicates that data is currently being received.
- Fixed green indicates that data is not currently being received, but data has been received within the last five minutes.

3.1.4 DISPLAY INFORMATION PANEL.

The display information panel is located on the right side of the `Real Time Display`. It shows the site id, time display, az/el display, maximum range, and data selection for the display. The operator can also access the overlay feature and color scale.

3.1.4.1 Site ID Field. This field shows the three letter site ID.

3.1.4.2 Time Display. The data time is displayed to the nearest second in large format numerals. When no data is being received, the display time will not update so that the time will reflect the

data that remains on the screen. The date of the data is displayed in smaller characters above the time.

3.1.4.3 AZ/EL Display. Azimuth and elevation angles are displayed to the nearest tenth degree in large format numerals. This will update approximately once per second when data is being received. When no data is being received, the angles will not update so that the elevation angle will reflect the data that remain on the screen.

3.1.4.4 Maximum Range. One of the four maximum ranges can be selected by clicking on the numerical field under the AZ/EL display.

3.1.4.5 Data Selection for Display. Click on this field to select the type of data for display. The choices are:

- dBZ
- Velocity
- Width

3.1.4.6 Overlays. This function is not used.

3.1.4.7 Color Scale. This function is used to change display resolution of moments.

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